nubeca

RT-1261A Ear and Forehead Thermometer

Owner's Manual

311-1261000-009 Version 1.0 April, 2009

IMPORTANT SAFETY INSTRUCTIONS

READ THIS BEFORE USING

The following basic safety precautions should always be taken.

1. Close supervision is necessary when the thermometer is used by, on, or near children, handicapped persons or invalids.
2. Use the thermometer only for the intended use described in this manual.
3. Do not use the thermometer if it is not working properly, or if it has suffered any damage.

KEEP THESE INSTRUIONS

TABLE OF CONTENT

06 Cautions and Warnings

07 Restrictions of Use

08 Introduction

09 Highlighted Features

10 Package Contents

11 Thermometer Parts

12 LCD Screen

14 Replacing the Battery

16 About Normal Body Temperature & Fever

17 Using the Device

17 As an Ear Thermometer

19 Hints on Taking Ear Temperature

20 As a Skin/Surface Scan Thermometer

22 Recalling the Memory

24 Viewing Results on a Personal Computer

27 Care & Cleaning

27 Fever Indicator

28 Troubleshooting

29 Specifications

30 Symbol Information

31 Warranty

Cautions and Warnings

- As with any thermometer, proper technique is crucial to obtaining accurate temperature readings. ***Please read this manual thoroughly and carefully before using.***
- Always store the thermometer in a cool and dry place -20 ℃ to 60℃(-4℉ to 140℉）and relative humidity less than 95%.
- ***Avoid direct sunlight.***
- ***Avoid dropping*** the thermometer.
- ***Do not*** touch the probe lens.
- ***Do not*** disassemble the thermometer.
- Basic safety precautions should always be observed, especially when the thermometer is used on or near children and disabled persons.
- This thermometer is not intended to subsitute for a consultation with your physician.
- The skin/surface scan temperature serves as a ***reference only. It cannot be a judgment on fever.***
- Temperature of left and right ear may differ. Always measure using the same ear.

Restrictions of Use

This thermometer is clinically proven to produce accurate temperature measurements. However, please be advised of the following:

- Accuracy cannot be ensured for a person who has deformity in the ear such that the thermometer probe cannot be properly inserted into the ear canal.
- Accuracy cannot be ensured when blood or drainage is found in the ear canal.
- If ear drops or medications have been placed in one ear, take temperature from the other ear.
- If you wear ear plug or hearing aid, remove the device and wait for 15 minutes before taking temperature.

NOTE

Never try to clean inside the ears. You may accidentally damage the eardrum or its surrounding tissues. Remove excess earwax only when you can reach it with a clean cloth. Consult a physician if you suspect the presence of excess earwax.

Introduction

Thank you for choosing nu-beca RT-1261A ear and forehead thermometer. This innovative medical device relies on advanced infrared (IR) technology to measure temperature instantly and accurately through two convenient sites: the ear canal and the surface of the skin over the temple.
nu-beca RT-1261A ear and forehead thermometer is an elegantly designed infrared thermometer meant for your family.

Intended use

nu-beca RT-1261A ear and forehead thermometer is intended for the intermittent measurement and monitoring of human body temperature from ear canal or skin/surface scan. The device is intended for use by people of all ages in the home.

How does it work

The thermometer measures the infrared heat generated by the eardrum and its surrounding tissue, or by the surface of the skin over the temporal artery. The thermometer then converts it into a temperature value shown on LCD.

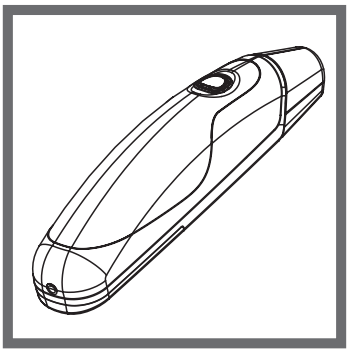
NOTE

The thermometer does not emit any infrared signal.

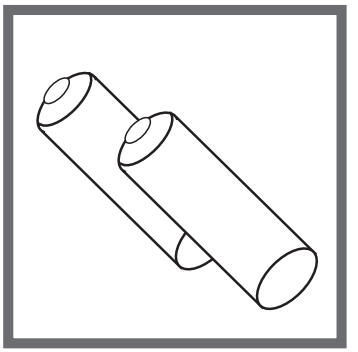
Highlighted Features

- Provide two body temperatures: ear or skin/surface scan.
- Fast and accurate: meets the accuracy requirement specified in ASTM E1965-98 and the EC directive 93/42/EEC.
- Non-contact measurement does not require lens filter, there by saving cost of replacement.
- Automatically power down if left unused over 3 minutes.
- Memory function allows you to recall previous results up to 10 previous results.
- Easy to read LCD with backlight (green light for normal body temperature and red light for fever indicator) and the night light for dark environment or night.

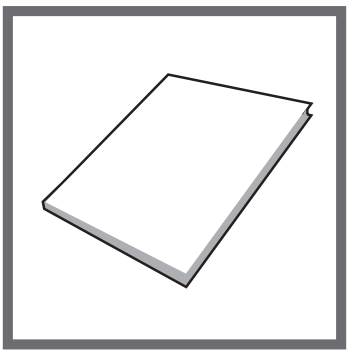
Package Contents



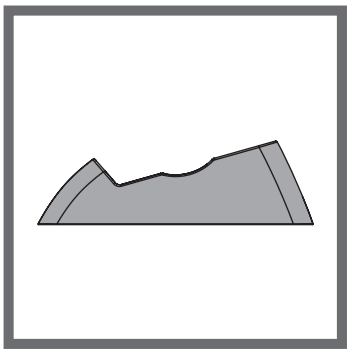
nu-beca RT-1261A Ear and Forehead Thermometer



Two 1.5V AAA Batteries



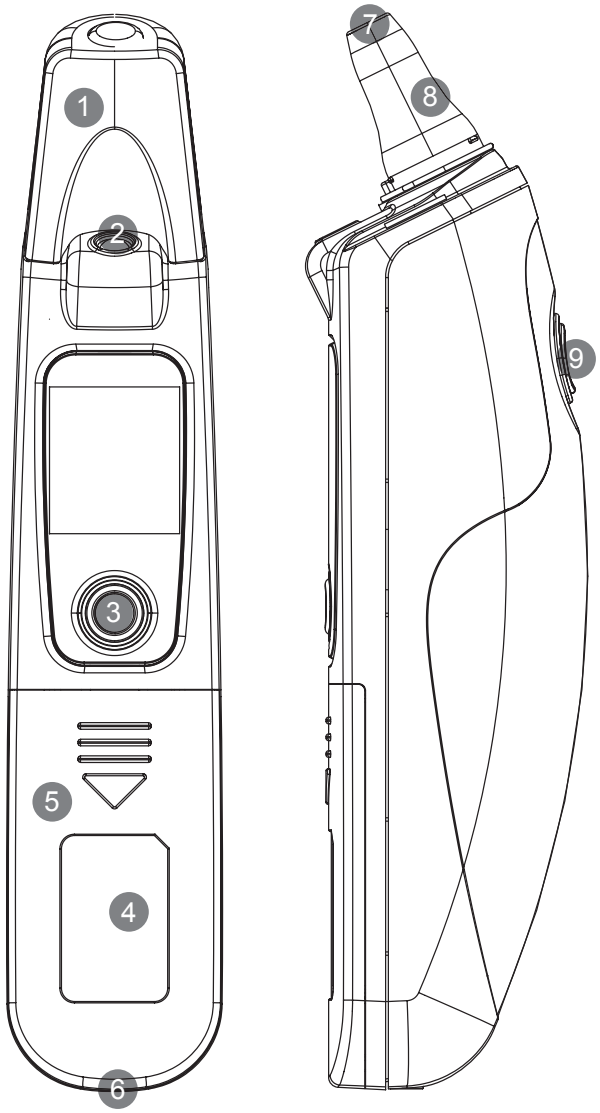
User's Manual



Storage Case

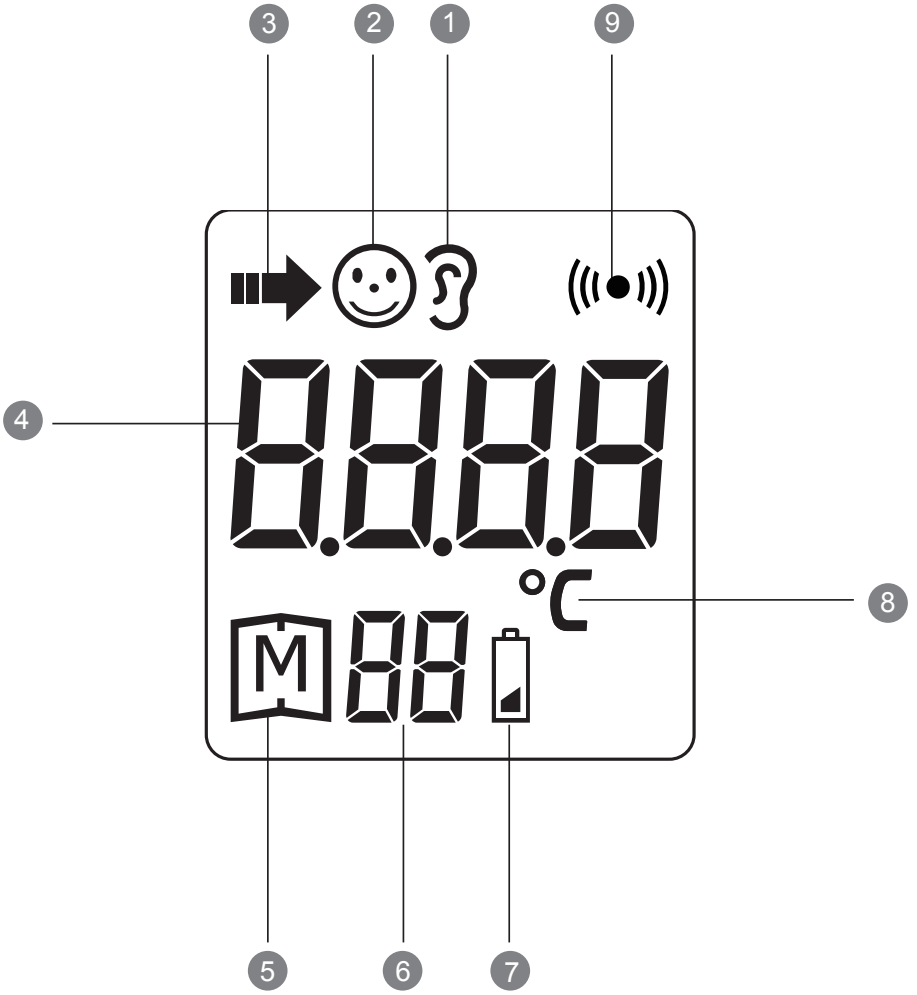
Warranty Card

Thermometer Parts



1. Probe cover
2. Night light
3. On/Memory button
4. Sticker
5. Battery cover
6. Data port
7. Probe lens
8. Probe
9. Scan button

LCD Screen



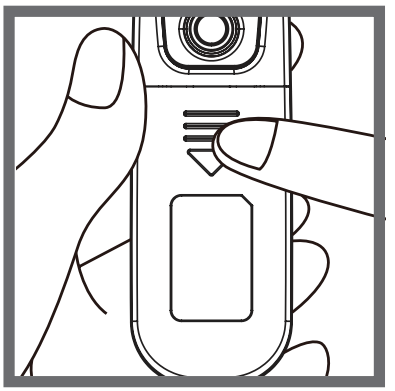
1. Ear temperature indicator
2. Skin/Surface temperature indicator
3. Temperature scanning in progress
4. Temperature reading
5. Memory mode
6. Record numbers
7. Low bettery indicator
8. Temperature unit
9. Communication symbol

Replacing the Battery

The thermometer comes with two 1.5V AAA alkaline batteries. Replace them when “ ” appears. Please follow the steps to replace new batteries.

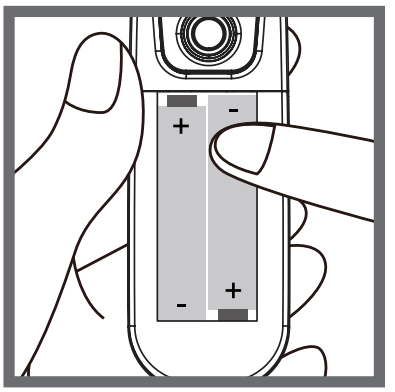
Step 1

Remove the battery cover.



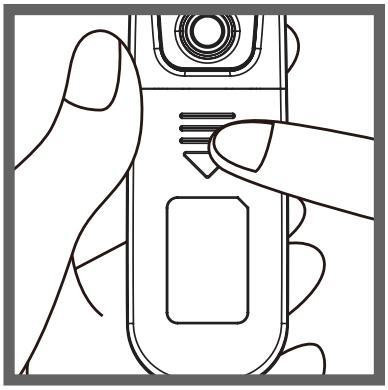
Step 2

Place the new battery in the battery compartment and press it in until the battery is firmly secured.



Step 3

Reattach the battery cover.



NOTE

- *Although the thermometer works when "🔋" appears, we still recommend that you change the battery to obtain an accurate result.*
- *Remove the battery if stored for a long period of time.*
- *The battery should be kept out of reach of children. If batteries are swallowed, contact a physician immediately.*

About Normal Body Temperature & Fever

Body temperature can vary from one individual/person to next. It also varies by location on the body and time of day. Below shows the statistical normal ranges from different sites. Please keep in mind that temperatures measured from different sites, even at the same time, should not be directly compared.

Fever indicates that the body temperature is higher than normal. This symptom may be caused by infection, overdressing or immunization. Some people may not experience fever even when they are ill. These include, but are not limited to, infants younger than 3 months old, persons with compromised immune systems, persons taking antibiotics, steroids or antipyretics (aspirin, ibuprofen, acetaminophen), or persons with certain chronic illnesses. ***Please consult your physician when you feel ill even if you do not have fever.***

Table 1[*1]

Body Site	Normal Temperature Range
Oral	35.5℃ - 37.5℃(95.9℉ - 99.5℉)
Axillary (underarm)	34.7℃ - 37.3℃(94.5℉ - 99.1℉)
Rectal	36.6℃ - 38.0℃(97.9℉ - 100.4℉)
Ear	35.8℃ - 38.0℃(96.4℉ - 100.4℉)

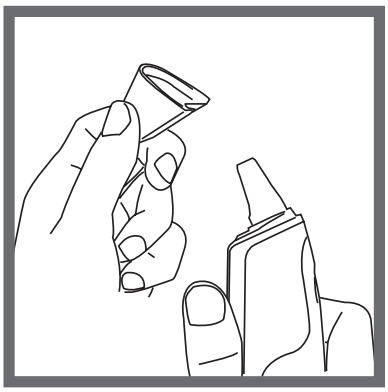
*1. Chamberlain, J. M. Terndrup, T. E., New Light on Thermometer Readings,Contemporary Pediatrics, March 1994.

Using the Device

As an Ear Thermometer

Step 1

Remove the probe cover first.



Step 2

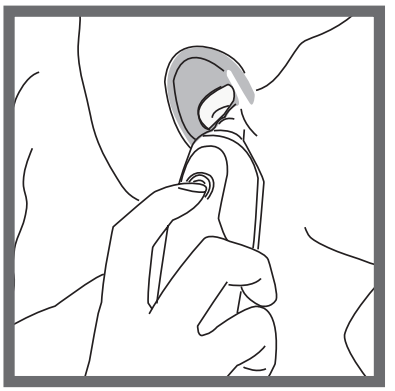
Turn on the thermometer.
Press and release the On / Memory button. When ready, the thermometer displays the last measurement.

Step 3

Gently fit the probe into the ear canal.

Step 4

Press and release the Scan button.
Do not remove the thermometer until it beeps.



Step 5

Read the result.
" " is shown together with a temperature value.

NOTE

- *The thermometer does not require any costly lens filters.*
- *Turn off the thermometer by pressing On / Memory button twice. It will automatically turn off if left idle for 3 minutes.*
- *If you need to take another reading, wait " " flashing before taking another measurement.*

Hints on Taking Ear Temperture

As with any other thermometer, you may observe slight variations in consecutive measurements. ***It is recommended that you take 3 temperature readings and use the highest one for the following situations:***

- Infants younger than 3 months old.
- Children younger than 3 years old who have a compromised immune system and the presence / absence of fever is critical.
- When you are learning to use the thermometer.

Do not take a reading while eating and /or talking. Wait 30 minutes after any of the following situations before taking a measurement:

- When you have your ear covered.
- After exercising, swimming, or taking a bath. When expose to extreme temperature.

To take accurate readings, the ear must be free from excess earwax build-up.

As a Skin/Surface Scan Thermometer

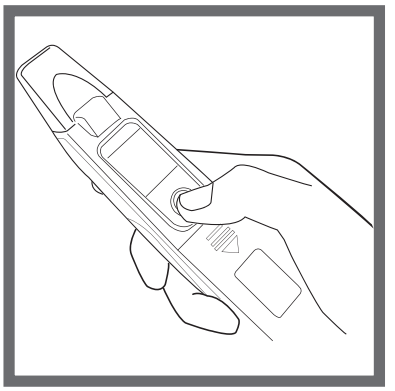
Step 1

Make sure the probe cover is capped.

Step 2

Turn on the thermometer.

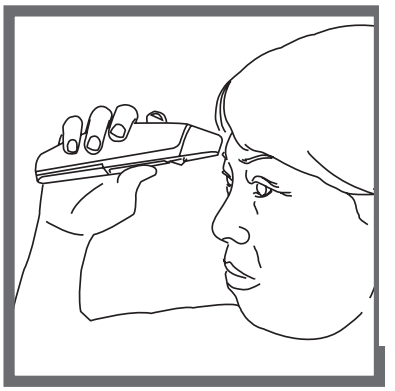
Press and release the On / Memory button. The thermometer displays the last measurement.

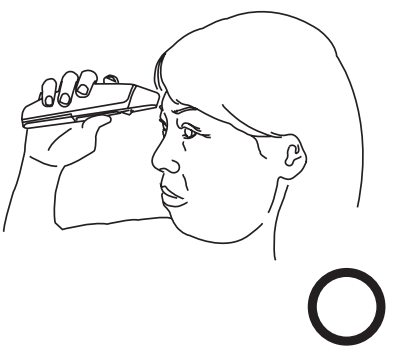


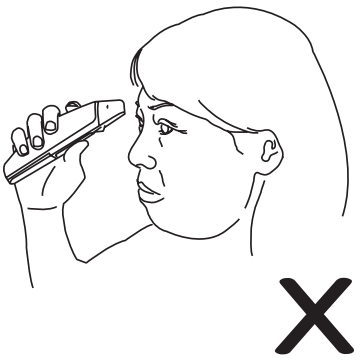
Step 3

Put the probe on the temple.

Press and hold the Scan button. Make sure the probe is flat on the temple, not at an angle.







Step 4

Read the result.

Release the button and read the result. “ ☺ ” is shown together with a temperature value and beeps.

NOTE

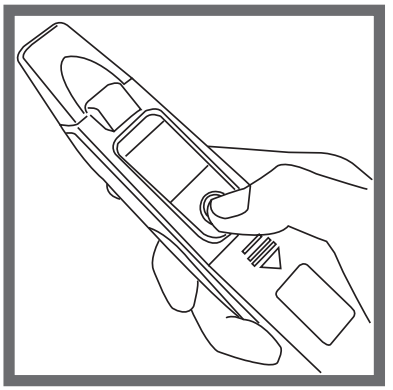
- *As the skin/surface scan temperature is likely to be affected by sweat, oil and the surroundings, the reading shall be taken as a* ***reference only.***
- *If the probe is placed at an angle on the skin/surface scan, the reading will be affected by surrounding temperature.*
- *You can perform a skin/surface scan from 3 cm away.*
- *Turn off the thermometer by pressing On / Memory button twice. Or leave for 3 minutes after a temperature measurement, the thermometer will automatically turn off.*
- *If you need to take another reading, for the flashing “ ➡ ” flashing before taking another measurement.*

Recalling the Memory

Your thermometer stores 10 most recent readings.

Step 1

Be sure the thermometer is OFF before recalling this memory.

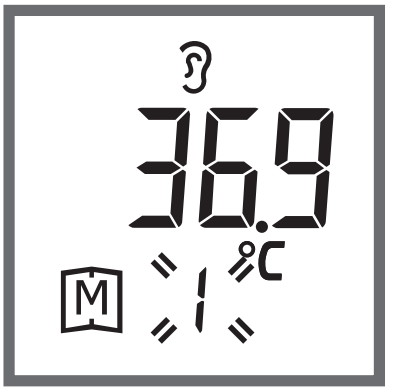


Step 2

Press the On / Memory button to turn on the thermometer.

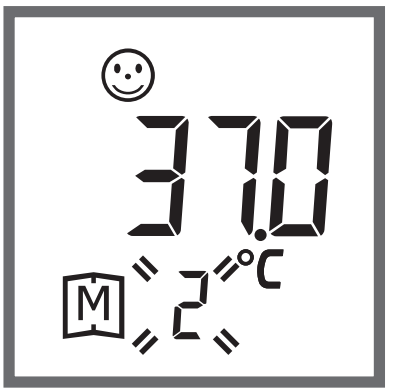
Step 3

Press the On / Memory button for 3 seconds to enter memory mode.



Each time you press the On / Memory button, a result will be displayed in the order of dates (latest result shown first), together with " M " and number (from 1 to 10).

When the memory is full, the oldest result is deleted as the new one added. When the last record displayed in the LCD, press On / Memory button again to return the first record.



Step 4

Exit the memory.

Press the Scan button and LCD will show latest results with flashing “ ➠ ” . Then press On / Memory button twice to exit the memory.

Care & Cleaning

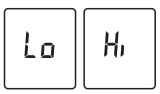
- Keep the probe clean, as earwax and grease build up may affect the measurement.
- To clean the probe lens, wipe it gently with an 70% alcohol swab or soft cloth moistened with 70% alcohol.
- The probe is not waterproof. Please wipe with a clean cloth which is dry or dampened with 70% alcohol.
- The body of the thermometer is not water-resistant. Never put the thermometer under a running tap or submerge it into water. Use a soft and dry cloth to clean it. Do not use abrasive cleaners.
- Store the thermometer in a cool and dry location. Free from dust and away from direct sunlight.

Fever Indicator

When the measurement is equal or over 38.0℃, red backlight is shown together with the result. The red backlight will last for 3 seconds and turn off.

Troubleshooting

The table below shows problems you may encounter. All error messages below would be shown together with orange backlight. Please follow “what to do” to resolve problems. If the problem still exists, please call your local dealer for help.

Message	What it means	What to do
	Appear when environmental temperature is below 10℃.	Put the thermometer under operating temperature range of 10℃ to 40℃.
	Appear when environmental temperature is above 40℃.	Put the thermometer under operating temperature range of 10℃ to 40℃.
	Battery is low and “ ” is shown on LCD.	Please replace batteries as soon as possible.
	Appears when the batteries can’t provide enough power for a test.	Please replace new batteries.
	Temperature measurement falls outside the displayed temperature range: ear temperature range from 32℃ to 43℃；skin/surface scan temperature range from 23℃ to 44℃.	Please follow this manual to take a reading again.

Specifications

Model no.	RT-1261A
Dimensions	162.2mm(W) x 38mm(H) x 32.4mm(D)
Weight	102.46 (include 2 x1.5V AAA batteries)
Battery	2 x 1.5V AAA alkaline batteries
External output	UART (USB& RS232) /ZigBee /Bluetooth
Displayed temperature range	Ear temperature displayed range: 32℃ to 43℃ (89.6℉~109.4℉) Skin/surface scan temperature displayed range: 23℃ to 44℃ (73.4℉~111.2℉)
Display resolution	0.1℃
Accuracy	Meet the accuracy requirement specified in ASTM E1965-98 ◢ ±0.2℃ (±0.4℉) for the range of 36.0℃ to 39.0℃ (96.8℉ to 102.2℉) ◢ ±0.3℃(±0.5℉) from 34.0℃ to 35.9℃ (93.2℉ to 96.6℉) and from 39.1℃ to 42.2℃ (102.4℉ to 108.0℉)
Temperature unit	℃
Operating temperature range	10℃ to 40℃ (50℉ to 104℉)
Operating humidity	95% RH or less
Storage temperature range	-20℃ to 60 ℃ (-4℉ to 140℉)
Storage humidity	95% RH or less
Memory capacity	10 measurements

Symbol Information

Symbol	Referent
	Consult instructions for use
	Keep away from sunlight
	Keep dry
	Temperature limitation
	Date of manufacture
	Manufacturer
SN	Serial number
	Caution, consult accompanying documents
EC REP	Authorized representative in the European Community
CE 0123	CE mark
	Type BF equipment
	Do not use if package is damaged.

Warranty

- nu-beca warrants this product to be free of defects in workmanship and materials for a period of ***ONE year*** from the date of purchase.
- During the warranty period, if this product is found to be defective, you may bring it together with the purchase receipt and Warranty Certificate on a carry-in basis to nu-beca's office during normal business hours for warranty service. We will then repair or replace defective parts or exchange the whole product as we select, at no charge to the original owner. After such repair, replacement or exchange, the product will be warranted from the date of purchase.
- This warranty is valid only if the Warranty Certificate and Warranty Registration Card are duly complete with date of purchase, serial number and dealer's stamp, and if the Warranty Registration Card is sent to local distributor office not later than 14 days from the date of purchase.
- This warranty is void if this product has been repaired or serviced by unauthorized personnel. This warranty does not cover defects caused by misuse, abuse, accident, tampering, poor maintenance, fire or any other acts beyond human control.
- Except as stated in the above paragraphs, nu-beca disclaims all other warranties, implied or expressed, including the warranties of merchantability of fitness for a particular purpose with respect to the use of this product. nu-beca shall not be liable for any direct, consequential or incidental damages arising out of the use or inability to use product.

NOTE